**Satellite Shade Analysis**

**Team Reflection Report**

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**Team Name:** JBOP Solutions

**Team members:** Taylor Born, Ben Johnson, Steffen Olson, Rachel Pang

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Software Design Process

**How did your team structure the software development process?**

For our project, we used an iterative development process, by incrementally adding features to the project. When we completed a major feature, we implemented it on the front-end and ensured it would work without any unexpected errors. We also divided up the tasks based on the strengths of each individual in the group.

**How did it go?**

It worked out as we expected. Major features such as the project system, the calculation algorithm and the front end were incrementally worked on through smaller tasks each week. These features were tested during implementation, and made to work as they were expected to before integration. Although it was hard to create smaller tasks for larger features later on, the project was completed on time and to the specifications of Rooftop Solar.

**What changes might you make in your development process if you have to do it again?**

For one, it would have been better to have a more structured plan for implementation before we started, because although we had both requirements and design documents, we didn’t have a clear and concise outline on how we planned to implement it.

Since we divided the tasks based on strengths of the group members, certain parts were understood better by some more than others. Therefore, certain questions about our project, during presentations for example, were harder to answer for some due to a lack of complete understanding of all parts of our project. Therefore we would ensure that whenever a major feature was added, we would meet up and ensure everyone understood what was implemented and how.

Software Development Tools

**What software tools or aids, if any, did your team members use to support or organize software development?**

We used Git to manage our source code and ensure everyone had a current version of our source code. In addition, we used some of the issue tracking offered by Bitbucket to post comments on certain commits that give insight on what should be changed or added to the code.

We used text-editors such as Sublime Text 2 and Xcode to modify our code. Sublime Linter was used to check the code syntax to make sure it is correct. Dreamweaver was used to modified the CSS and HTML of our project since it allowed some viewing when attaching CSS to HTML.

**How did it go?**

The tools we used worked very well. Once the team understood how to work with Git, it worked very well in managing the main source code for everyone. However, the issue tracking was a great feature, but underused by the team. Since it allowed for more detailed communication regarding specific commits or implementation, it would be great to use for refactoring code, or general discussion about certain commits.

Teaming and Project Management

**How did you organize your team?**

Or team was organized through the use of team meetings (in person and online), as well as weekly task reports to divide up what needs to be done, and progress reports via email to ensure things were being done and completed before they were due. We organized the implementation of our project based on team strengths, such as Steffen and Taylor doing primarily back end work, Ben doing front end work and Rachel forming presentations and documentation. Our team was mainly organized through working on things as needed including their tasks.

**How did you communicate within the team?**

Primarily, we communicated through Facebook Instant Messenger, email, and text messaging as finding time to meet up in person is difficult. This also allowed for reference on what was discussed, and what else needed to be completed, since you could look at the chat history. Whenever we found time to meet in person, we would meet after our meetings with our mentor, Dr. Doerry, and discuss specific tasks that we would do for that week. We would also regularly meet the Wednesday before major capstone presentations.

**How did it go?**

Due to the packed schedule one member had, it was hard to meet up as a full group in person for meetings. Therefore all team meetings were a lot less personal and sometimes not taken as seriously since they were done online. However, whenever we met up in person, it was hard to focus on one topic due to many other topics needing to be discussed, or worked on.

**What could you do better?**

We could have made more of an effort to wake up earlier before everyone started the day. This would allow for more discussion on current topics, as well as get feedback from every member on problems and comments on certain tasks for the week.